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                 IMSDRUGCONF removed from database clusters and STN
NEWS 24 DEC 17
                 DGENE now includes more than 10 million sequences
NEWS 25 DEC 17 TOXCENTER enhanced with 2008 MeSH vocabulary in
                 MEDLINE segment
         DEC 17
NEWS 26
                 MEDLINE and LMEDLINE updated with 2008 MeSH vocabulary
NEWS 27
         DEC 17
                 CA/CAplus enhanced with new custom IPC display formats
NEWS 28
         DEC 17
                 STN Viewer enhanced with full-text patent content
                  from USPATOLD
NEWS 29
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              19 SEPTEMBER 2007: CURRENT WINDOWS VERSION IS V8.2,
NEWS EXPRESS
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 SEPTEMBER 2007.
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=> d l1 ibib abs 1-11

PATENT ASSIGNEE(S):

L1 ANSWER 1 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2004:515313 CAPLUS

DOCUMENT NUMBER: 141:59753

TITLE: Oily composition based on lipoperoxides usable in the

treatment of xerostomia Desjonqueres, Stephane Laboratoires Carilene, Fr.

SOURCE: Fr. Demande, 14 pp.

CODEN: FRXXBL

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

INVENTOR(S):

PATENT NO.				KIN	KIND DATE			APPLICATION NO.					DATE				
FR 2848852			A1 B1		20040625			FR 2002-16517					20021223				
FR 2848852 WO 2004058138 WO 2004058138				A2 A3		20070316 20040715 20040930			WO 2003-FR3861					20031222			
W:	AE,	AG,		AM,	AT,	AU,	AZ,										
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RW:		•	•	KE,	•	•	•	•	•	•	•	•	•	•		AZ,	
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AU 2003303330		₽0,						, GN, GQ, GW, ML, AU 2003-303330			rik,	20031222					

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A2 20050921 EP 2003-813932 20031222
     EP 1575670
        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, BG, CZ, EE, HU, SK
     BR 2003017196 A 20051101 BR 2003-17196 20031222
JP 2006513199 T 20060420 JP 2004-563301 20031222

      JP 2004-563301
      20031222

      US 2005-538835
      20050613

      FR 2002-16517
      A 20021223

      JP 2006513199
      T 20060420

      US 2006078620
      A1 20060413

PRIORITY APPLN. INFO.:
                                            WO 2003-FR3861
                                                               W 20031222
OTHER SOURCE(S): MARPAT 141:59753
     The invention relates to an oily pharmaceutical composition containing
     peroxidized lipids and silica characterized in
     that it contains, by way of essential components, from the
     peroxidized lipids showing a rate of peroxidn. ranging
     between 5 and 600 milli-equivalent per kilo and 0.5 at 4% in silica
     weight dispersed with the center of the aforesaid lipids peroxides.
     In this composition, the peroxidized lipids are preferably
     obtained by peroxidn. of a natural vegetable oil and silica is
     preferably colloidal silica. The invention also relates to the
     use of the composition for the manufacture of a pharmaceutical composition
intended for
     the treatment of the dry mouth.
REFERENCE COUNT:
                      3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L1 ANSWER 2 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:133639 CAPLUS
DOCUMENT NUMBER:
                         134:168098
TITLE:
                        Use of peroxidized lipids as
                        lipidic film forming agents on the skin
                        Desjonqueres, Stephane
INVENTOR(S):
PATENT ASSIGNEE(S): Fr.
SOURCE:
                        Eur. Pat. Appl., 10 pp.
                         CODEN: EPXXDW
DOCUMENT TYPE:
                        Patent
LANGUAGE:
                        French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:
    PATENT NO. KIND DATE APPLICATION NO. DATE
     EP 1077064 A1 20010221 EP 2000-402277 20000811
         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
            IE, SI, LT, LV, FI, RO
    FR 2797586 A1 20010223 FR 1999-10511 FR 2797586 B1 20011109
                                                                   19990816
PRIORITY APPLN. INFO.:
                                           FR 1999-10511 A 19990816
                        MARPAT 134:168098
OTHER SOURCE(S):
   Peroxidized lipids are used as lipidic film forming
     agents on the skin for improving cicatrization of wounds, skin erythema,
     or sunburn. A cream contained oxidized glycerol triesters 20.0, acrylic
     polymer 4, perfume 0.5, sodium Me parahydroxybenoate 0.15, Pr
     parahydroxybenzoate 0.05, methylchloroisothiazolinone and
     methylisothizolinone 0.0012, and water q.s. 0.10%.
                       3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS
REFERENCE COUNT:
                               RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT
L1 ANSWER 3 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN
ACCESSION NUMBER: 2001:133636 CAPLUS
DOCUMENT NUMBER:
                         134:168096
TITLE:
                         Use of peroxidized lipids for
```

of the oral cavity

treating or preventing mucosal wounds and inflammation

INVENTOR(S): Desjonqueres, Stephane

PATENT ASSIGNEE(S): Fr.

SOURCE: Eur. Pat. Appl., 7 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent French LANGUAGE:

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE					
EP 1077061	A2	20010221	EP 2000-402276	20000811					
EP 1077061	A3	20010321							
R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IT, LI, LU,	NL, SE, MC, PT,					
IE, SI, LT,	LV, FI	, RO							
FR 2797584	A1	20010223	FR 1999-10514	19990816					
PRIORITY APPLN. INFO.:			FR 1999-10514	A 19990816					
OTHER SOURCE(S):	MARPAT	134:168096							
AB Peroxidized lipids are used for treating or preventing									

AΒ mucosal wounds and inflammation of the oral cavity by formation of a protective film on the mucosa. A protective buccal gel contained oxidized glycerol triesters 92.7, silica dioxide 7, sodium saccharinate 0.20, and liquorice fragrance 0.10%.

ANSWER 4 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 2000:808503 CAPLUS

DOCUMENT NUMBER: 133:366414

TITLE: Use of peroxidized lipids to

prevent and/or treat the irritating effect of an

active agent

INVENTOR(S): Desjonqueres, Stephane Laboratoire Carilene, Fr. PATENT ASSIGNEE(S): SOURCE: Eur. Pat. Appl., 14 pp.

CODEN: EPXXDW

DOCUMENT TYPE: Patent LANGUAGE: French

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE		
EP 1051979	A1	20001115	EP 2000-401257	20000509		
R: AT, BE, CH,	DE, DK	, ES, FR, GB	, GR, IT, LI, LU, NL,	SE, MC, PT,		
IE, SI, LT,	LV, FI	, RO				
FR 2793410	A1	20001117	FR 1999-6079	19990512		
FR 2793410	B1	20041029				
US 6416767	В1	20020709	US 1999-333924	19990616		
PRIORITY APPLN. INFO.:			FR 1999-6079	A 19990512		
OTHER SOURCE(S):	MARPAT	133:366414				

AB Peroxidized lipids are used in pharmaceutical and

cosmetic compns. containing an irritant active ingredient, e.g. capsicin or retinoic acid, to treat or prevent its irritating effects. A topical composition containing maize oil peroxidized lipids 90.925,

Aerosil-300 7, 1% capsicin 0.075, and perfume 2% was tested in volunteers. Increased cutaneous tolerance to capsaicin in volunteers was shown.

Formulation of different vehicles containing peroxidized

lipids is disclosed.

REFERENCE COUNT: THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L1 ANSWER 5 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN ACCESSION NUMBER: 1996:539358 CAPLUS

DOCUMENT NUMBER: 125:192440

Chemical characterization of peroxidized TITLE:

low-density lipoprotein in plasma and aortic atheroma

AUTHOR(S): Kanazawa, Takemichi; Osanai, Tomohiro; Uemura,

Tsugumichi; Onodera, Kogo; Metoki, Hirobumi

CORPORATE SOURCE: School of Medicine, Hirosaki University, Hirosaki,

Japan

Pathobiology (1996), 64(1), 18-26 SOURCE:

CODEN: PATHEF; ISSN: 1015-2008

PUBLISHER: Karger DOCUMENT TYPE: Journal English LANGUAGE:

Hydroperoxidized cholesteryl linoleate (HPO-CL, spot X1) was produced by peroxidn. of normal LDL isolated from plasma of healthy persons. Spot X1 stained on thin-layer chromatog. plate (silica 60) between triglycerides and free fatty acids. The solvent mixture used consisted of petroleum ether 75, Et ether 25, and acetic acid 1. Spot X1 of plasma from healthy subjects stained slightly. It was also identified in plasma LDL of patients with atherosclerotic diseases, and in total lipids extracted from aortic atheroma obtained at autopsy. Whereas spot X1 obtained from plasma LDL of patients with atherosclerotic diseases consisted of HPO-CL, spot X1 obtained from aortic atheroma was reduced HPO-CL (hydroxide CL). Spot X1 of aortic atheroma did not react to p-methoxydiphenylpyrenylphosphine (MP3) - an agent which shows only pos. reaction to hydroperoxide chemical structures - although spot X1 of plasma LDL from atherosclerotic diseases reacted pos. to MP3. Moreover, spot X1 obtained from aortic atheroma showed the same Rf value as that of the reduced HPO-CL. The IR profile of spot X1 obtained from aortic atheroma was similar to that of hydroxide CL, although the IR profile of HPO-CL was similar to that obtained from plasma LDL of atherosclerotic patients. In addition, HPO-CL was not recognized in the LDL fraction with clathrin-coated pits from aortic atheroma.

ANSWER 6 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN L1

ACCESSION NUMBER: 1996:105866 CAPLUS

DOCUMENT NUMBER: 124:172278

TITLE: Mature human atherosclerotic plaque contains

peroxidized phosphatidylcholine as a major

lipid peroxide

AUTHOR(S): Piotrowski, J. J.; Shah, S.; Alexander, J. J.

CORPORATE SOURCE: Dep. Surgery, Case Western Reserve Univ., Cleveland,

OH, 44109, USA

SOURCE: Life Sciences (1996), 58(9), 735-40

CODEN: LIFSAK; ISSN: 0024-3205

Elsevier PUBLISHER: DOCUMENT TYPE: Journal LANGUAGE: English

The initial stage of atherosclerotic plaque formation involves oxidation of AB the phosphatidyl-choline moiety of low d. lipoprotein (LDL) and subsequent uptake by macrophages. Ongoing uptake in developing plaque also may involve oxidized LDL and would require an oxidizing environment in plaque lipids. Atherosclerotic plaque lipids from 12 patients undergoing peripheral vascular procedures were extracted in chloroform: methanol (2:1). This extract was applied to a 25 cm 5  $\mu$  silica HPLC column and eluted with a ternary gradient mobile phase utilizing a laser light scattering (ELSD) mass detector. Individual lipid fractions were then analyzed. Cholesterol, both free and esterified, was the most prominent lipid in plaque ( $104\pm74$  mg/gm tissue). However, lipid peroxides were present in much higher concentration  $(3.52\pm2.84 \text{ FU} + 104/\text{mg phospholipid})$  and overall level (21.27 $\pm$ 10.10 FU + 104/gm plaque) in the phospholipid component

(\*). Phosphatidyl-choline (PC) accounted for 63% of the total

phospholipid peroxides recovered (6.31 $\pm$ 5.09 mg/gm plaque; \*). PC and phosphatidylinositol (PI) content were linearly related to lipid peroxide fluorescence (PC; r = 0.696) (PI; r = 0.809). Lipid peroxides in human atherosclerotic plaque are present primarily in the phospholipid component and phosphatidyl-choline forms the bulk of these peroxides. PC may play an important role in ongoing plaque lipid accumulation.

L1 ANSWER 7 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1988:586542 CAPLUS

DOCUMENT NUMBER: 109:186542

TITLE: HPLC analysis of lipid peroxides. III.

Qualitative and quantitative analyses of autoxidized

phospholipids by multi-channel UV detector

AUTHOR(S): Yamaya, Hiroshi; Hara, Setsuko; Totani, Yoichiro

CORPORATE SOURCE: Fac. Eng., Seikei Univ., Musashino, Japan

SOURCE: Yukagaku (1988), 37(8), 618-24

Yukagaku (1988), 3/(8), 618-24 CODEN: YKGKAM; ISSN: 0513-398X

DOCUMENT TYPE: Journal LANGUAGE: Japanese

Naturally occurring glycerophospholipids which are mainly composed of phosphatidylcholine (PC), phosphatidylethanolamine (PE), phosphatidylinositol (PI), and phosphatidylserine (PS) were able to be separated into their mol. species by reversed-phase HPLC. The separation was achieved on a silica C1 (Fine SIL C1) column, using a mobile phase of hexane/2-propanol/water (6:8:1 volume/volume/volume) at a flow rate of 1.0 mL/min., and the eluants were monitored simultaneously at 210 nm with a multichannel UV detector. Peroxidized mol. species of soybean phospholipids such as PC-30, in which PC content was .apprx.30%, PC-70, PC-95, and PE, could be selectively identified by monitoring with the detector at 235 nm, and good linear relations (Y = 1.01 + 10-3X, correlation coefficient r = 0.981-0.991 for all samples used) were observed between the ratio of peak area at 235 nm of the peroxides to that of all peaks at 210 nm on the chromatogram and peroxide value (POV) of sample phospholipid in the range of 0-50 mequiv/kg. On the basis of this linear relation, POVs of each mol. species of autoxidized phospholipids originated from soybean, linseed, and egg yolk were determined, and reliable values could be obtained by this newly developed method having good reproducibility and the lowest detection limits of 0.5 nequiv of peroxides in comparison with the potentiometric POV method, which was employed as a standard method to measure the POV of samples.

L1 ANSWER 8 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1979:102040 CAPLUS

DOCUMENT NUMBER: 90:102040

ORIGINAL REFERENCE NO.: 90:16117a,16120a

TITLE: A single-phase system for TLC analysis of amino acids,

lipoperoxides, and their reaction products

AUTHOR(S): Kuck, James C.; St. Angelo, Allen J.; Ory, Robert L.

CORPORATE SOURCE: SRRC, Agric. Res. Cent., New Orleans, LA, USA

SOURCE: Oleagineux (1978), 33(10), 507-8, 511-12

CODEN: OLEAAF; ISSN: 0030-2082

DOCUMENT TYPE: Journal LANGUAGE: English

AB A model thin-layer chromatog. system utilized a single-phase solvent to sep. and identify the amino acid-lipoperoxide products formed between threonine [72-19-5] and lysine [56-87-1] and linoleate hydroperoxide [7722-17-0]. The products were separated from the free amino acids and unreacted hydroperoxide on a thin-layer plate coated with silica gel G, were developed in a 4-phase mixed solvent system of petroleum ether-Et20-HOAc (60:40:1), then sprayed with Cu(OAc)2-H3PO4 solution to locate all spots. Results from mass and IR spectroscopic anal. of the

desolventized products formed between the amino acids and peroxidized lipids scraped from the preparative plates indicate that they are new reaction products. Five reaction products were found in each mixture

L1 ANSWER 9 OF 12 CAPLUS COPYRIGHT 2008 ACS on STN

ACCESSION NUMBER: 1978:617104 CAPLUS

DOCUMENT NUMBER: 89:217104

ORIGINAL REFERENCE NO.: 89:33737a,33740a

TITLE: The detection of native fluorescence in

peroxidized fatty acids

AUTHOR(S): Gutteridge, J. M. C.; Lunec, J.; Heys, A. D. CORPORATE SOURCE: Dep. Clin. Biochem., Whittington Hosp., London, UK

SOURCE: Dep. CIII. Blochem., whittington Hosp., Londo Source: Analytical Letters (1978), A11(7), 537-44

CODEN: ANALBP; ISSN: 0003-2719

DOCUMENT TYPE: Journal LANGUAGE: English

AB In the absence of amino donors and transition metal ions, fluorescent compds. with spectral characteristics similar to Schiff bases are formed by the peroxidn. of linolenic acid [463-40-1], indicating that spectrofluorometric anal. is suitable for monitoring lipid peroxidn. as a function of primary peroxides as well as secondary carbonyls involved in Schiff base formation. The peroxidn. products are separated on silica gel columns. Two peroxidn. compds. display UV fluorescence, and a third (most polar) shows visible fluorescence. Irradiation of the fluorescent zone associated with unchained fatty acids decreases the UV fluorescence and increases the visible fluorescence.

L1 ANSWER 10 OF 12 MEDLINE ON STN ACCESSION NUMBER: 97009687 MEDLINE DOCUMENT NUMBER: PubMed ID: 8856791

TITLE: Chemical characterization of peroxidized

low-density lipoprotein in plasma and aortic atheroma.

AUTHOR: Kanazawa T; Osanai T; Uemura T; Onodera K; Metoki H

CORPORATE SOURCE: Second Department of Internal Medicine, Hirosaki University

School of Medicine, Japan.

SOURCE: Pathobiology: journal of immunopathology, molecular and

cellular biology, (1996) Vol. 64, No. 1, pp. 18-26.

Journal code: 9007504. ISSN: 1015-2008.

PUB. COUNTRY: Switzerland

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199702

ENTRY DATE: Entered STN: 19 Feb 1997

Last Updated on STN: 19 Feb 1997

Entered Medline: 3 Feb 1997

AB Hydroperoxidized cholesteryl linoleate (HPO-CL, spot X1) was produced by peroxidation of normal LDL isolated from plasma of healthy persons. Spot X stained on thin-layer chromatography plate (silica 60) between triglycerides and free fatty acids. The solvent mixture used consisted of petroleum ether 75, ethyl ether 25, and acetic acid 1. Spot X1 of plasma from healthy subjects stained slightly. It was also identified in plasma LDL of patients with atherosclerotic diseases, and in total lipids extracted from aortic atheroma obtained at autopsy. Whereas spot X1 obtained from plasma LDL of patients with atherosclerotic diseases consisted of HPO-CL, spot X1 obtained from aortic atheroma was reduced HPO-CL (hydroxide CL). Spot X1 of obtained from aortic atheroma was reduced HPO-CL (hydroxide CL). Spot X1 of aortic atheroma did not react to p-methoxydiphenylpyrenylphosphine (MP3)-an agent which shows only positive reaction to hydroperoxide chemical structures-although spot X1 of

plasma LDL from atherosclerotic diseases reacted positively to MP3. Moreover, spot X1 obtained from aortic atheroma showed the same Rf value as that of the reduced HPO-CL. The IR profile of spot X1 obtained from aortic atheroma was similar to that of hydroxide CL, although the IR profiled HPO-CL was similar to that obtained from plasma LDL of atherosclerotic patients. In addition, HPO-CL was not recognized in the LDL fraction with clathrin-coated pits from aortic atheroma.

L1 ANSWER 11 OF 12 MEDLINE ON STN ACCESSION NUMBER: 96184916 MEDLINE DOCUMENT NUMBER: PubMed ID: 8632720

TITLE: Mature human atherosclerotic plaque contains peroxidized phosphatidylcholine as a major

lipid peroxide.

AUTHOR: Piotrowski J J; Shah S; Alexander J J

CORPORATE SOURCE: Case Western Reserve University, Department of Surgery,

Cleveland, Ohio 44109, USA.

SOURCE: Life sciences, (1996) Vol. 58, No. 9, pp. 735-40.

Journal code: 0375521. ISSN: 0024-3205.

PUB. COUNTRY: ENGLAND: United Kingdom

DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199606

ENTRY DATE: Entered STN: 15 Jul 1996

Last Updated on STN: 15 Jul 1996 Entered Medline: 28 Jun 1996

AΒ The initial stage of atherosclerotic plaque formation involves oxidation of the phosphatidyl-choline moiety of low density lipoprotein (LDL) and subsequent uptake by macrophages. Ongoing uptake in developing plaque also may involve oxidized LDL and would require an oxidizing environment in plaque lipids. Atherosclerotic plaque lipids from 12 patients undergoing peripheral vascular procedures were extracted in chloroform: methanol (2:1). This extract was applied to a 25 cm 5 micron silica HPLC column and eluted with a ternary gradient mobile phase utilizing a laser light scattering (ELSD) mass detector. Individual lipid fractions were then analyzed. Cholesterol, both free and esterified, was the most prominent lipid in plaque (104  $\pm$ /- 74 mq/qm tissue. However, lipid peroxides were present in much higher concentrations (3.52 +/-  $2.84 \, \mathrm{FU} \, \mathrm{X} \, 10(4) / \mathrm{mg}$  phospholipid) and overall level (21.27 +/- 10.10 FU X 10(4)/gm plaque) in the phospholipid component (\*p< 0.05). Phosphatidyl-choline (PC) accounted for 63% of the total phospholipid peroxides recovered (6.31 +/- 5.09 mg/gm plaque; \*p<0.05). PC and phosphatidylinositol (PI) content were linearly related to lipid peroxide fluorescence (PC; r=0.696; p=0.01) (PI; r=0.809; p=0.001). Lipid peroxides in human atherosclerotic plaque are present primarily in the phospholipid component and phosphatidyl-choline forms the bulk of these peroxides. PC may play an important role in ongoing plaque lipid accumulation.

## => d l1 ibib abs 12

L1 ANSWER 12 OF 12 MEDLINE ON STN ACCESSION NUMBER: 95252226 MEDLINE DOCUMENT NUMBER: PubMed ID: 7734451

TITLE: Cholest-3,5-dien-7-one formation in peroxidized

human plasma as an indicator of lipoprotein cholesterol

peroxidation potential.

AUTHOR: Hahn M; Tang M; Subbiah M T

CORPORATE SOURCE: Department of Internal Medicine, University of Cincinnati

Medical Center, University Hospital, OH 45267-0540, USA.

CONTRACT NUMBER: HL-50881 (NHLBI)

SOURCE: Biochimica et biophysica acta, (1995 Apr 6) Vol. 1255, No.

3, pp. 341-3.

Journal code: 0217513. ISSN: 0006-3002.

PUB. COUNTRY: Netherlands

DOCUMENT TYPE: (COMPARATIVE STUDY)

Journal; Article; (JOURNAL ARTICLE) (RESEARCH SUPPORT, U.S. GOV'T, P.H.S.)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199506

ENTRY DATE: Entered STN: 15 Jun 1995

Last Updated on STN: 15 Jun 1995

Entered Medline: 6 Jun 1995

AΒ Lipoprotein peroxidation susceptibility is routinely evaluated using products of unsaturated fatty acids as markers (e.g., malonaldehyde). The significance and factors influencing peroxidation of cholesterol moiety of lipoproteins are relatively unknown due to lack of a reliable marker product which can be measured easily. Under the influence of Cu2+ ions, the major product of lipoprotein cholesterol peroxidation (isolated after saponification) was cholest-3-5-dien-7-one (CSD). Apart from gas-liquid chromatography, this compound lends itself for measurement by alternative methods. Due to lack of the 3 beta-hydroxyl group, CSD was separated from the rest of the oxysterols and cholesterol by passing through digitonin-coated silica-gel G and its concentration was determined by absorption at 283 nm. The recovery of CSD by this method exceeded by 87%. The formation of CSD was also sensitive to vitamin E and therefore could be used as an index of lipoprotein cholesterol susceptibility to peroxidation.

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